

Last login: Mon Mar 8 01:29:15 on ttys001

The default interactive shell is now zsh.  
To update your account to use zsh, please run `chsh -s /bin/zsh`.  
For more details, please visit <https://support.apple.com/kb/HT208050>.  
yanans-MacBook-Pro-Z:~ xieyanan\$ mysql -u root -p  
Enter password:  
Welcome to the MySQL monitor. Commands end with ; or \g.  
Your MySQL connection id is 12  
Server version: 8.0.23 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> create database lianxi02 character set utf8;
Query OK, 1 row affected, 1 warning (0.01 sec)
```

```
mysql> use lianxi02;
Database changed
```

```
mysql> create table dept(
-> id int primary key auto_increment,
-> name varchar(20)
-> );
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql>
mysql> insert into dept (name) values ('开发部'),('市场部'),('财务部');
Query OK, 3 rows affected (0.01 sec)
Records: 3 Duplicates: 0 Warnings: 0
```

```
mysql> create table employee (
-> id int primary key auto_increment,
-> name varchar(10),
-> gender char(1), -- 性别
-> salary double, -- 工资
-> join_date date, -- 入职日期
-> dept_id int,
-> foreign key (dept_id) references dept(id) -- 外键, 关联部门表(部门表的主键)
-> );
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql>
mysql> insert into employee(name,gender,salary,join_date,dept_id) values('孙悟空','男',7200,'2013-02-24',1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into employee(name,gender,salary,join_date,dept_id) values('猪八戒','男',3600,'2010-12-02',2);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into employee(name,gender,salary,join_date,dept_id) values('唐僧','男',9000,'2008-08-08',2);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into employee(name,gender,salary,join_date,dept_id) values('白骨精','女',5000,'2015-10-07',3);
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into employee(name,gender,salary,join_date,dept_id) values('蜘蛛精','女',4500,'2011-03-14',1);
Query OK, 1 row affected (0.00 sec)
```

mysql> #1 查询工资最高的员工是谁

```
mysql> select name, salary from employee
-> where salary = (
-> select max(salary)
-> from employee
-> );
```

```
+-----+-----+
| name | salary |
+-----+-----+
| 唐僧 | 9000 |
+-----+-----+
1 row in set (0.00 sec)
```

mysql> #2 查询工资小于平均工资的员工有哪些?

```
mysql> select name, salary from employee
-> where salary < (
-> select avg(salary)
-> from employee
-> );
```

```
+-----+-----+
| name | salary |
+-----+-----+
| 猪八戒 | 3600 |
| 白骨精 | 5000 |
| 蜘蛛精 | 4500 |
+-----+-----+
3 rows in set (0.00 sec)
```

mysql> #3 查询大于5000的员工, 来自于哪些部门, 输出部门的名字

```
mysql> select e.name, e.salary, d.name
-> from employee as e
-> join dept as d
-> on e.dept_id = d.id
-> where e.salary>5000;
```

```
+-----+-----+-----+
| name | salary | name |
+-----+-----+-----+
| 孙悟空 | 7200 | 开发部 |
| 唐僧 | 9000 | 市场部 |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

mysql> #4 查询开发部与财务部所有的员工信息, 分别使用子查询和表连接实现

mysql> -- 子查询

```
mysql> select e.*, d.name as dept_name
-> from employee e, dept d
-> where e.dept_id = d.id
-> and dept_id in (
-> select d.id
-> from dept d
-> where d.name in ('开发部', '财务部')
-> );
```

```
+-----+-----+-----+-----+-----+-----+
| id | name | gender | salary | join_date | dept_id | dept_name |
+-----+-----+-----+-----+-----+-----+
| 1 | 孙悟空 | 男 | 7200 | 2013-02-24 | 1 | 开发部 |
| 5 | 蜘蛛精 | 女 | 4500 | 2011-03-14 | 1 | 开发部 |
| 4 | 白骨精 | 女 | 5000 | 2015-10-07 | 3 | 财务部 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

mysql> -- 表连接

```
mysql> select e.*, d.name as dept_name
-> from employee as e
-> left join dept as d
-> on e.dept_id = d.id
-> where d.name in ('开发部', '财务部');
```

```
+-----+-----+-----+-----+-----+-----+
| id | name | gender | salary | join_date | dept_id | dept_name |
+-----+-----+-----+-----+-----+-----+
| 1 | 孙悟空 | 男 | 7200 | 2013-02-24 | 1 | 开发部 |
| 5 | 蜘蛛精 | 女 | 4500 | 2011-03-14 | 1 | 开发部 |
| 4 | 白骨精 | 女 | 5000 | 2015-10-07 | 3 | 财务部 |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

mysql> #5 查询2011年以后入职的员工信息和部门信息, 分别使用子查询和表连接实现

mysql> -- 子查询

```
mysql> select e.*, d.name as dept_name
-> from employee e, dept d
-> where e.dept_id = d.id
-> and e.id in (
-> select e.id
-> from employee e
-> where year(e.join_date) >= 2011
```

```
-> );
```

id	name	gender	salary	join_date	dept_id	dept_name
1	孙悟空	男	7200	2013-02-24	1	开发部
5	蜘蛛精	女	4500	2011-03-14	1	开发部
4	白骨精	女	5000	2015-10-07	3	财务部

3 rows in set (0.00 sec)

```
mysql> -- 表连接
mysql> select e.*, d.name as dept_name
-> from employee as e
-> left join dept as d
-> on e.dept_id = d.id
-> where year(e.join_date) >= 2011;
```

id	name	gender	salary	join_date	dept_id	dept_name
1	孙悟空	男	7200	2013-02-24	1	开发部
4	白骨精	女	5000	2015-10-07	3	财务部
5	蜘蛛精	女	4500	2011-03-14	1	开发部

3 rows in set (0.00 sec)

```
mysql>
mysql>
mysql>
```